

# ESPE-12012-P3

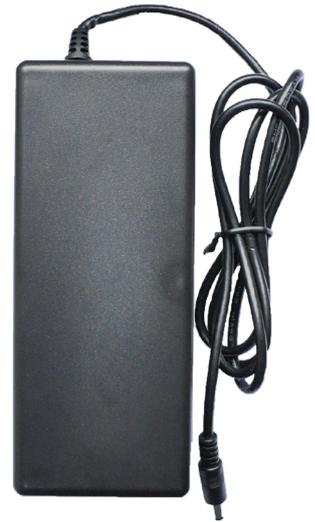
▪ high quality desktop 12 V power supply

## FEATURES:

- compact design
- high power output
- premium class design
- fully protected
- safe and reliable

## APPLICATIONS:

- consumer electronics
- office equipment
- general purpose
- computer devices
- POS, POI equipment



**ESPE-12012-P3** is a compact and efficient 120-watt desktop power unit for various types of electronic devices. It is based on high quality electronic components that allow continuous, long-lasting work in all conditions. It is reliable, fully secured and stable. It provides high efficiency and excellent specification.

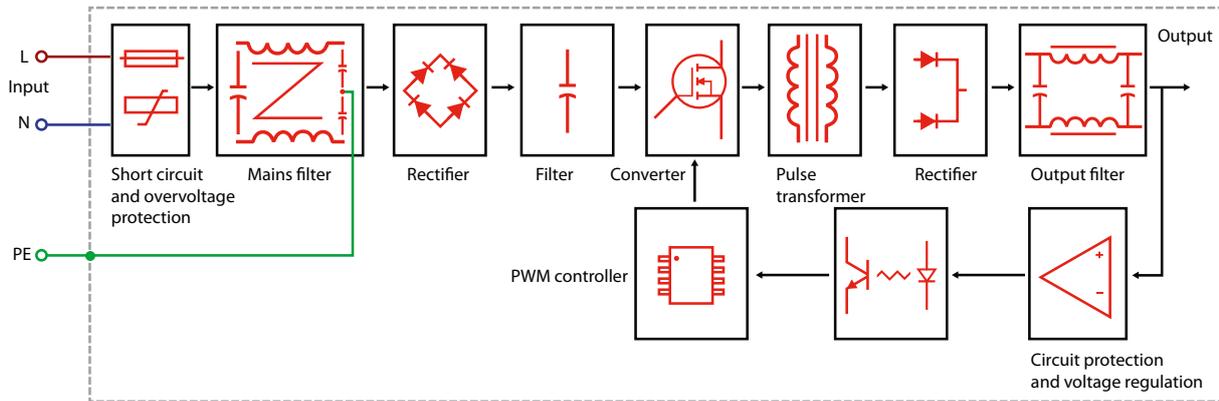
## TECHNICAL SPECIFICATION

Group	Parameter	Value	Conditions
Input	Rated input voltage	100-240 VAC	
	Input voltage range	90-264 VAC	
	Mains frequency range	47-63 Hz	
	AC current (max.)	2.7 A	At 100 VAC and full load
	Inrush current (max.)	80 A	
	No load power consumption	0.5 W	
	Input leakage current (max.)	Max. 0.25 mA	At 264 VAC
	Power factor correction	No	
Output	Rated output voltage	12 V	
	Rated output power	120 W	
	Rated output current	10 A	
	Efficiency	85%	At 230 VAC
	Line regulation	±3%	
	Load regulation	±5%	
	Ripple and noise	200 mVp-p	At 100 VAC
	Minimal output current	No	
	Hold up time (max.)	Over 5 ms	At 100 VAC and full load
	DC voltage rise time (max.)	Up to 40 ms	At 100 VAC and full load
Turn on delay time (max.)	Up to 3 s	At 100 VAC and full load	
Environmental	Working temperature	0 to +40°C	
	Working humidity	25% to 75% RH	40°C
	Storage temperature	-10°C to +80°C	
	Cooling method	Free air circulation	
Protection	Short circuit	Yes	
	Overcurrent	Yes	
	Output overvoltage	Yes	
	Automatic recovery on fault remove	Yes	
Safety and EMC	Withstand isolation voltage	3 kVAC (input to output)	5 mA, 1 min
	Isolation resistance	100 MΩ	500 VDC
	Isolation class	2	
	Safety compliance	EN60950-1	
	EMC compliance	EN55022 class B	
	Marking	RoHS, CE	
Mechanical and features	Enclosure	Black ABS plastic	
	Dimension	175 × 72 × 42 mm	D × S × W
	Weight	490 g	
	Output connector	DC Jack 2.1 × 5.5 × 10 mm	Plus in the middle
	Input connector	IEC320 C13 3-pole socket	
	Output cable	1.5 m	2.1 mm <sup>2</sup>
	Single package	200 × 80 × 90 mm	
	Packing	425 × 420 × 200 mm	50 pieces
Manufacturing	China		
Warranty	3 years		

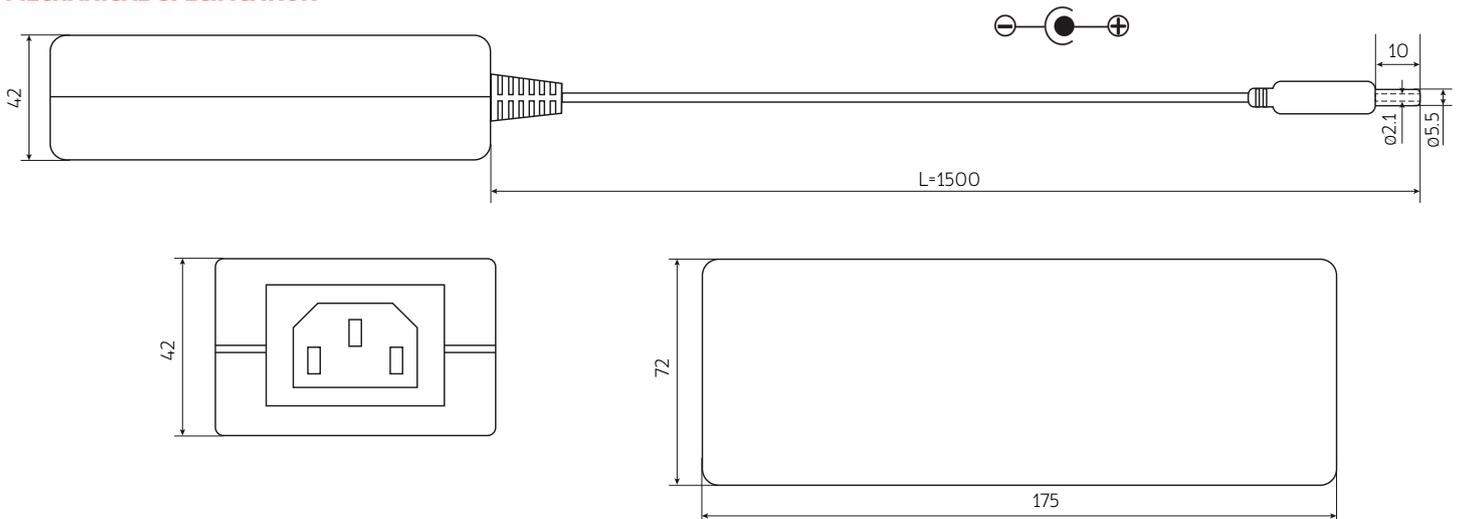
## Notes:

Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25°C and relative humidity 70% for rated load output. The values of parameters related to the output voltage regulation is measured from low to high line or for load changes from 0 to 100%, respectively. The power supply is considered as an independent unit, but the final equipment still need to reconfirm that the whole system complies with the EMC directives. If the PSU is installed in the final device as a subassembly, the tests should be repeated to verify that the system has been met compliance. Detailed technical data are available on request.

## BLOCK DIAGRAM



## MECHANICAL SPECIFICATION



## PRODUCT LABEL



### Legend to the label icons:

- - II safety class: no grounding is required, no dangerous voltage even in an emergency situation will appear on output
- 🏠 - power supply intended for indoor use only
- 🔒 - means safety isolating control gear with short circuit protection
- ⊖-⊕ - polarization: plus in the middle, minus outside
- ♻️ - the product must not be disposed of in normal waste containers

## MARKING SYSTEM

### ESPE-12012-P3

- Input socket type **P3**
- Rated output voltage **12 V**
- Output power **120 W**
- Family **ESPE**

## OTHER POWER SUPPLIES IN THIS SERIES

Model	ESPE-3612-T2	ESPE-6012-T2	ESPE-9012-P3	<b>ESPE-12012-P3</b>	ESPE-9024-P3	ESPE-12024-P3
Rated output voltage	12 V	12 V	12 V	12 V	24 V	24 V
Rated output current	3 A	5 A	7.5 A	10 A	3.75 A	5 A
Rated output power	36 W	60 W	90 W	120 W	90 W	120 W
Efficiency	88%	89%	85%	85%	75%	89%
Plug type	DC Jack 2.1×5.5×11 mm – straight			DC Jack 2.1×5.5×10 mm – straight		DC Jack 2.1×5.5×11 mm – angled